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09/923,941	08/07/2001	Masahiro Ikariko	F-7110	4552

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EXAMINER
JONES, SCOTT E

ART UNIT	PAPER NUMBER
3713	14

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/923,941	Applicant(s) IKARIKO, MASAHIRO	
	Examiner Scott E. Jones	Art Unit 3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2004 and 05 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/7/01* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment and request for continued examination filed on January 8, 2004 and February 5, 2004, respectively, in which applicant amends claims 1-6, 11-12, and 14-15, adds new claims 16-20, amends the specification, and responds to the claim rejections. Claims 1-20 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 8, 2004 has been entered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Reference sign **(530)** is not shown in figure 16 as described on page 28, line 7 of the specification.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because:

- The block diagram blocks labeled "To Game Controller" are not referred to with reference sign (**100**) in figures 3, 12, and 13.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 15 and 16 are objected to because of the following informalities:

- In Claim 15, lines 12-13, the phrase "the viewing point information" lacks proper antecedent basis in the claims; therefore, the examiner recommends the phrase be changed to "a viewing point information" or "viewing point information".
- In Claim 16, line 3, the phrase "the viewing point information" lacks proper antecedent basis in the claims; therefore, the examiner recommends the phrase be changed to "a viewing point information" or "viewing point information".

Correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, and 6-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koji (JP 08-221187) in view of Kawamoto (U.S. 6,361,439).

Koji discloses a game system that provides a viewpoint on a display based on an object in a game. In particular, Koji discloses a method and system for providing a player's viewpoint of an image on a display based upon the game player's detected head position during progress of a game. Koji additionally discloses:

Regarding Claims 1 and 11-20:

- a detecting unit (**11**) for detecting the position of the viewing point in a play area in front of and apart from the monitor (Figure 1, Abstract, and disclosure);
- a game control unit (**13**) for controlling the progress of the game (Figure 1, Abstract, and disclosure); and
- a display control unit (**15**) for generating a three-dimensional image including the enemy character viewed from the viewing point of the simulated camera (player's viewpoint) and displaying it on the monitor (**14**) (Figures 1, 10, Abstract, and disclosure).

Regarding Claims 6 and 15:

- wherein the detecting unit comprises a head detecting unit (**11**) arranged to detect a position of the head of a game player in the play area along a left-right direction of said fighting video game machine (Fig. 1, Abstract, and disclosure).

Regarding Claims 12 and 15:

- a head position detected by the head detecting unit is used as the viewpoint of the simulated camera (Figure 10, Abstract, and disclosure).

Regarding Claim 13:

- the viewing point of the simulated camera coincides with the eyes of the game player (Figure 10, Abstract, and disclosure).

Koji seems to lack explicitly disclosing:

Regarding Claims 1, 14, and 15:

- a sound control unit for controlling a sound output based on the enemy character;
- a first sound generator and a second sound generator arranged in different positions to produce sound output based on the enemy character;
- attacking position judging means arranged to determine whether a distance between a bullet fired by the enemy character displayed on the monitor at the attacking position and the viewing point of the simulated camera is less than or greater than a threshold distance value; and
- wherein the sound control unit causes a sound to be outputted from the first sound generator when the distance between the fired bullet and the viewing point is determined by the attacking position judging means to be greater than the threshold value and causes the sound to be outputted from the second sound generator when distance is determined by the attacking position judging means to be less than the threshold value.

Regarding Claim 2:

- the first sound generator is provided in a position distant from the play area and the second sound generator is provided in a position proximate to the play area.

Regarding Claims 7, 8 and 15:

- the sound control unit controls the outputted sound volumes of the loudspeakers depending upon the detected result of the head of the player along the left-right direction. Although Koji does not explicitly disclose this feature, it would be obvious to generate sounds based on distance to simulate reality.

Regarding Claim 9:

- wherein the first sound generator is arranged at a position higher than the monitor while the second sound generator is arranged at a position lower than the monitor.

Regarding Claim 10:

- wherein the first sound generator includes a single loudspeaker provided substantially a central position along a left-right direction of said fighting video game machine and the second sound generator includes a pair of loudspeakers, provided above the monitor and left and right sides of the monitor.

Kawamoto teaches of a shooting video game wherein the frequency components of the generated sounds are altered according to the distance between the sound generation position and listening position in the virtual game space. Both Kawamoto and Koji are directed towards features for video games and are therefore analogous art. Furthermore, Kawamoto teaches:

Regarding Claims 1, 14, and 15:

- a sound control unit for controlling a sound output based on the enemy character (Abstract, Figures 1-3 and 5-8, Column 1, line 55-Column 2, line 9, Column 2, line 36-Column 3, line 4, and Column 3, line 59-Column 4, line 7);
- a first sound generator (any one of addresses 0-4) and a second sound generator (any one of addresses 0-4) arranged in different positions to produce sound output based

on the enemy character (Abstract, Figures 1-3 and 5-8, Column 1, line 55-Column 2, line 9, Column 2, line 36-Column 3, line 4, and Column 3, line 59-Column 4, line 7); and

- attacking position judging means arranged to determine whether a distance between a bullet fired by the enemy character displayed on the monitor at the attacking position and the viewing point of the simulated camera is less than or greater than a threshold distance value; and
- wherein the sound control unit causes a sound to be outputted from the first sound generator when the distance between the fired bullet and the viewing point is determined by the attacking position judging means to be greater than the threshold value and causes the sound to be outputted from the second sound generator when distance is determined by the attacking position judging means to be less than the threshold value (Abstract, Figures 1-3 and 5-8, Column 1, line 55-Column 2, line 9, Column 2, line 36-Column 3, line 4, and Column 3, line 59-Column 4, line 7).

Regarding Claim 2:

- the first sound generator is provided in a position distant from the play area and the second sound generator is provided in a position proximate to the play area (Abstract, Figures 1-3 and 5-8, Column 1, line 55-Column 2, line 9, Column 2, line 36-Column 3, line 4, and Column 3, line 59-Column 4, line 7).

It would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention, to incorporate the audio features of Kawamoto in Koji. One would be motivated to do so because the system would impart a sense of distance to the sound effects

audio without losing the powerful impact of the sound effects audio making the game experience more realistic.

Regarding claims 9 and 10, to one having ordinary skill in the art, it would have been obvious to arrange the loudspeakers as recited in claims 9 and 10 on a gaming machine. To one having ordinary skill in the art at the time of applicant's invention, it was well known to provide audio control systems in video games to create a realistic effect. Therefore, it would have been obvious to arrange the loudspeakers in such a way as to create realistic sounds as a player plays a game.

8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koji (JP 08-221187) in view of Kawamoto (U.S. 6,361,439) and in further view of Muehle et al. (U.S. 5,980,254).

Koji in view of Kawamoto teaches that as discussed above regarding Claims 1, 2 and 6-20. However, Koji in view of Kawamoto seems to lack explicitly teaching:

Regarding Claim 3:

- the attack is shooting, the sound control unit causes a hitting sound to be outputted from the first sound generator when the attacking position judging means judges that a fired bullet has hit an obstacle displayed before the viewing point of the simulated camera while causing a sound hurtling through the air to be outputted from the second sound generator when the attacking position judging means judges that the fired bullet has passed beside the viewing point of the simulated camera.

Regarding Claim 4:

- the attack is shooting, the sound control unit causes a hitting sound to be outputted from the first sound generator when the attacking position judging means judges that a fired bullet has hit an obstacle displayed at a distance before the viewing point of the simulated camera while causing a hitting sound to be outputted from the second sound generator when the attacking position judging means judges that the fired bullet has hit an obstacle displayed right before the viewing point of the simulated camera.

Regarding Claim 5:

- the attacking position judging means is adapted to judge that the bullet has hit the viewing point of the simulated camera, and the sound control unit causes a target-hitting sound to be outputted from the second sound generator when the attacking position judging means makes such a judgment.

Kawamoto additionally teaches:

Regarding Claim 3:

- the attack is shooting, the sound control unit causes a hitting sound to be outputted from the first sound generator when the attacking position judging means judges that a fired bullet has hit an obstacle displayed before the viewing point of the simulated camera (Figures 2, 5, Column 2, lines 49-63, Column 3, lines 31-40, and Column 3, line 59-Column 4, line 7).

Regarding Claim 4:

- the attack is shooting, the sound control unit causes a hitting sound to be outputted from the first sound generator when the attacking position judging means judges that

a fired bullet has hit an obstacle displayed at a distance before the viewing point of the simulated camera while causing a hitting sound to be outputted from the second sound generator when the attacking position judging means judges that the fired bullet has hit an obstacle displayed right before the viewing point of the simulated camera (Figures 2, 5, Column 2, lines 49-63, Column 3, lines 31-40, and Column 3, line 59-Column 4, line 7).

Regarding Claim 5:

- the attacking position judging means is adapted to judge that the bullet has hit the viewing point of the simulated camera, and the sound control unit causes a target-hitting sound to be outputted from the second sound generator when the attacking position judging means makes such a judgment (Figures 2, 5, Column 2, lines 49-63, Column 3, lines 31-40, and Column 3, line 59-Column 4, line 7).

Furthermore, the combination of Koji in view of Kawamoto seems to lack explicitly disclosing:

Regarding Claim 3:

- while causing a sound hurtling through the air to be outputted from the second sound generator when the attacking position judging means judges that the fired bullet has passed beside the viewing point of the simulated camera.

However, Muehle et al. teaches of an electronically controlled weapons range with return fire that can be implemented in combat games. Muehle et al., like Kawamoto and Koji, relates to a video game and are therefore analogous art. Furthermore, Muehle et al. teaches:

Regarding Claim 3:

- while causing a sound hurtling through the air to be outputted from the second sound generator when the attacking position judging means judges that the fired bullet has passed beside the viewing point of the simulated camera (Column 7, lines 12-15).

It would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention, to incorporate the audio features of Muehle in the combination of Koji and Kawamoto. One would be motivated to do so because the system would impart a sense of distance to the sound effects audio without losing the powerful impact of the sound effects audio making the game experience more realistic.

Response to Arguments

9. Applicant's arguments and amendments, see pages 4-21, filed January 8, 2004, with respect to the rejection to claims 1-2, 9-10, and 14 under 35 U.S.C. 103(a) as being unpatentable over Shimizu (U.S. 5,862,229) have been fully considered and are persuasive because Shimizu is directed to determining a distance between to objects in a displayed three-dimensional image rather than between the physical game player and an object on the display. The rejection to claims 1-2, 9-10, and 14 under 35 U.S.C. 103(a) as being unpatentable over Shimizu (U.S. 5,862,229) has been withdrawn. However, a new ground of rejection is provided above.

10. Applicant's arguments, see page 3 and 14, filed January 8, 2004, with respect to the objection to the specification has been fully considered and is persuasive. The objection of the specification has been withdrawn.

11. Applicant's arguments, see pages 9-11 and 14, filed January 8, 2004, with respect to the objection to claims 14 and 15 have been fully considered and are persuasive. The objection to claims 14 and 15 have been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott E. Jones whose telephone number is (703) 308-7133. The examiner can normally be reached on Monday - Thursday, 6:30 A.M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on (703) 308-1327. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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